

**MICHIGAN STATE**  

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**U N I V E R S I T Y**

# Project Plan

## Secretary of State (SoS) Software Robot

### The Capstone Experience

#### Team Auto-Owners

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Spring 2019



*From Students...  
...to Professionals*

# Functional Specifications

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- Expedite Worker's Compensation Insurance Claims Submissions
- Reconcile Business Name against Secretary of State websites
- Utilize Software Robots
- Provide Reporting Dashboard with Metrics



# Design Specifications

- Agent page
  - Form for data entry on an application
- Underwriter page
  - Menu to select applications that need to be reviewed
  - Once application selected, show form of data provided
  - Button to initiate software robot
  - Form to show suggested names returned by softbot
- Dashboard page
  - Report statistics on softbot search results
  - Charts and graphs to represent robot metrics



# Screen Mockup: Agent Page

***Auto-Owners***  
**INSURANCE**  
LIFE • HOME • CAR • BUSINESS

Business State:

Named Insured:   
[Verify Against the SoS Database](#) ?

Doing Business As:

[Add Another DBA](#)

Officer Name:

First:  Last:  Ownership Percentage:  % ?

[Add Another Officer](#)

FEIN:

[Add Another Named Insured](#)

[Submit](#)



# Screen Mockup: Underwriter Page

## *Auto-Owners* INSURANCE

LIFE • HOME • CAR • BUSINESS

### Recent Applications

ID#	Business Name	State	Other Info	View
1	Mark's Business	Michigan	Other Info	<a href="#">Small button</a>
2	Jacob's Business	Alabama	Other Info	<a href="#">Small button</a>
3	Larry's Business	Texas	Other Info	<a href="#">Small button</a>
1	Joey's Business	Michigan	Other Info	<a href="#">Small button</a>
2	Jacob's Business	Alabama	Other Info	<a href="#">Small button</a>



# Screen Mockup: Application View

## Application Information

Business State:

Select A State

Named Insured:

Name Insured

Doing Business As:

Doing Business As

Doing Business As:

Doing Business As

Doing Business As:

Doing Business As

Add Another DBA

Suggested Name:

Suggested Business Name

Update

Agent Name:

Agent Name

Suggested Name:

Suggested Business Name

Update

Agent Name:

Agent Name



# Screen Mockup: Application View

Suggested Name:  [Update](#)

Agent Name:

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Officer Name:

First:	<input type="text" value="First"/>	Last:	<input type="text" value="Last"/>	Ownership Percentage: <a href="#">?</a>	<input type="text" value="%"/>
First:	<input type="text" value="First"/>	Last:	<input type="text" value="Last"/>	Ownership Percentage: <a href="#">?</a>	<input type="text" value="%"/>
First:	<input type="text" value="First"/>	Last:	<input type="text" value="Last"/>	Ownership Percentage: <a href="#">?</a>	<input type="text" value="%"/>

[Add Another Officer](#)

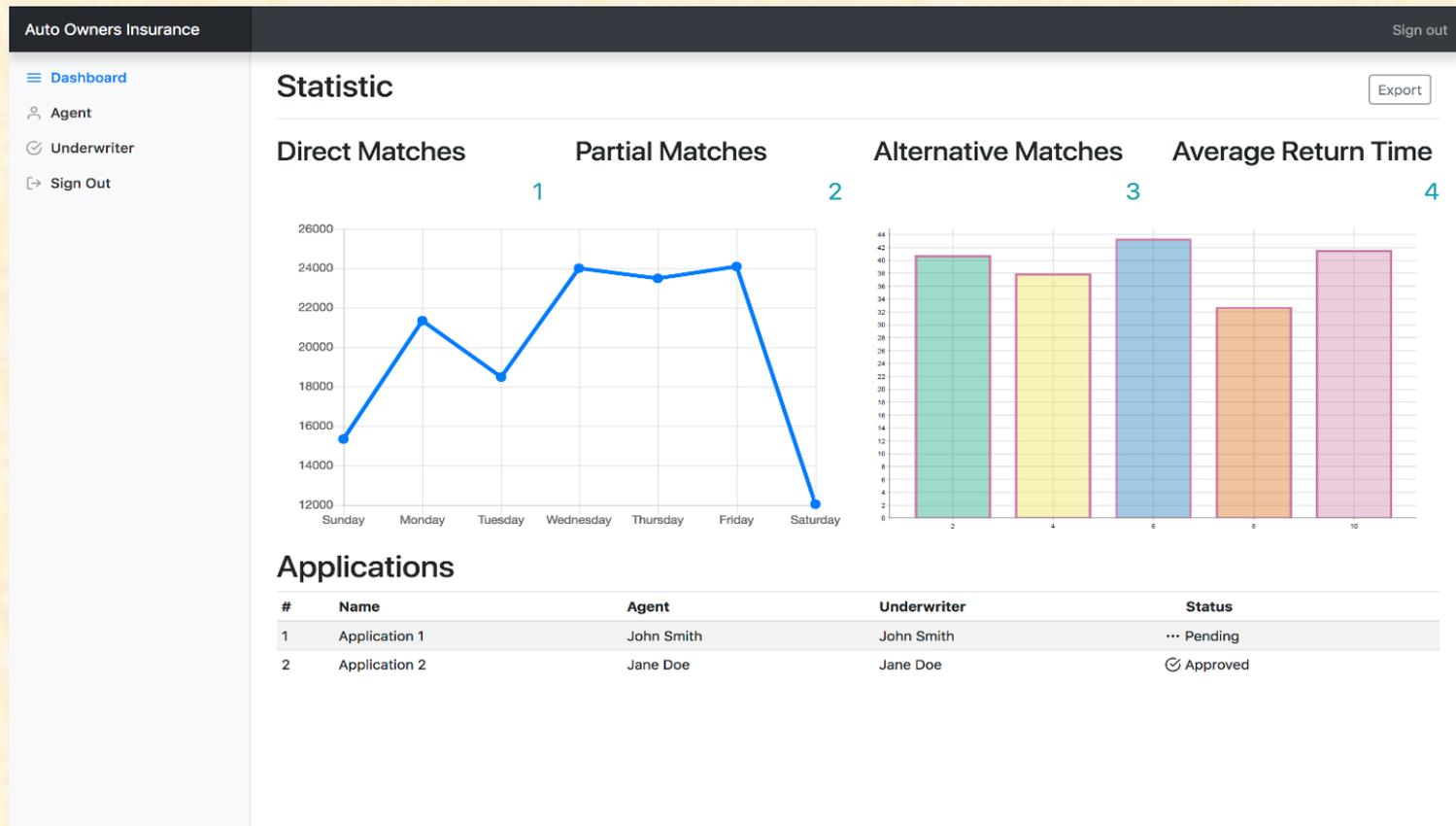
FEIN:

[Add Another Named Insured](#)

[Submit](#) [Submit Other Result](#) [Verify Information](#)



# Screen Mockup: Dashboard



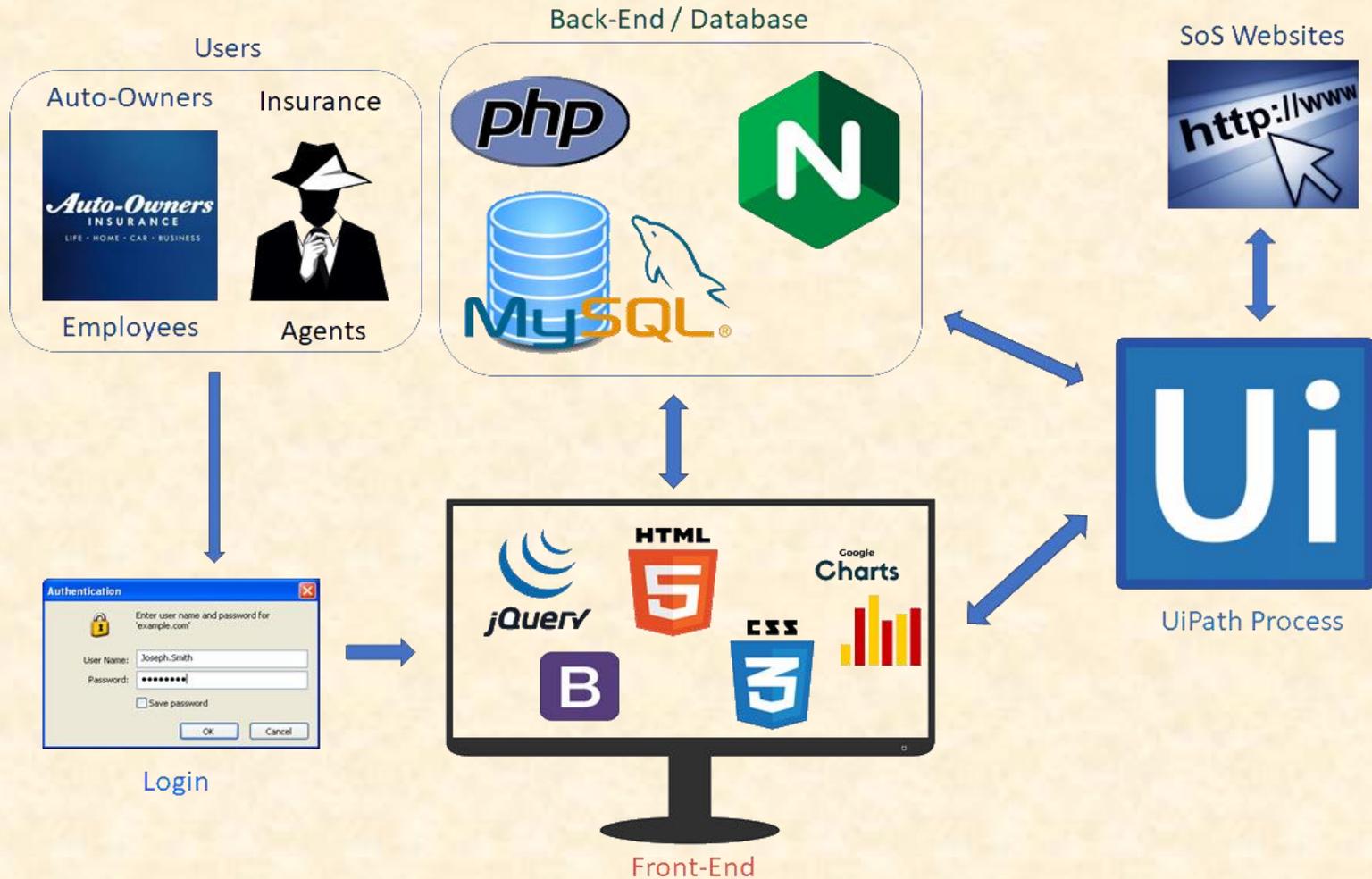
# Technical Specifications

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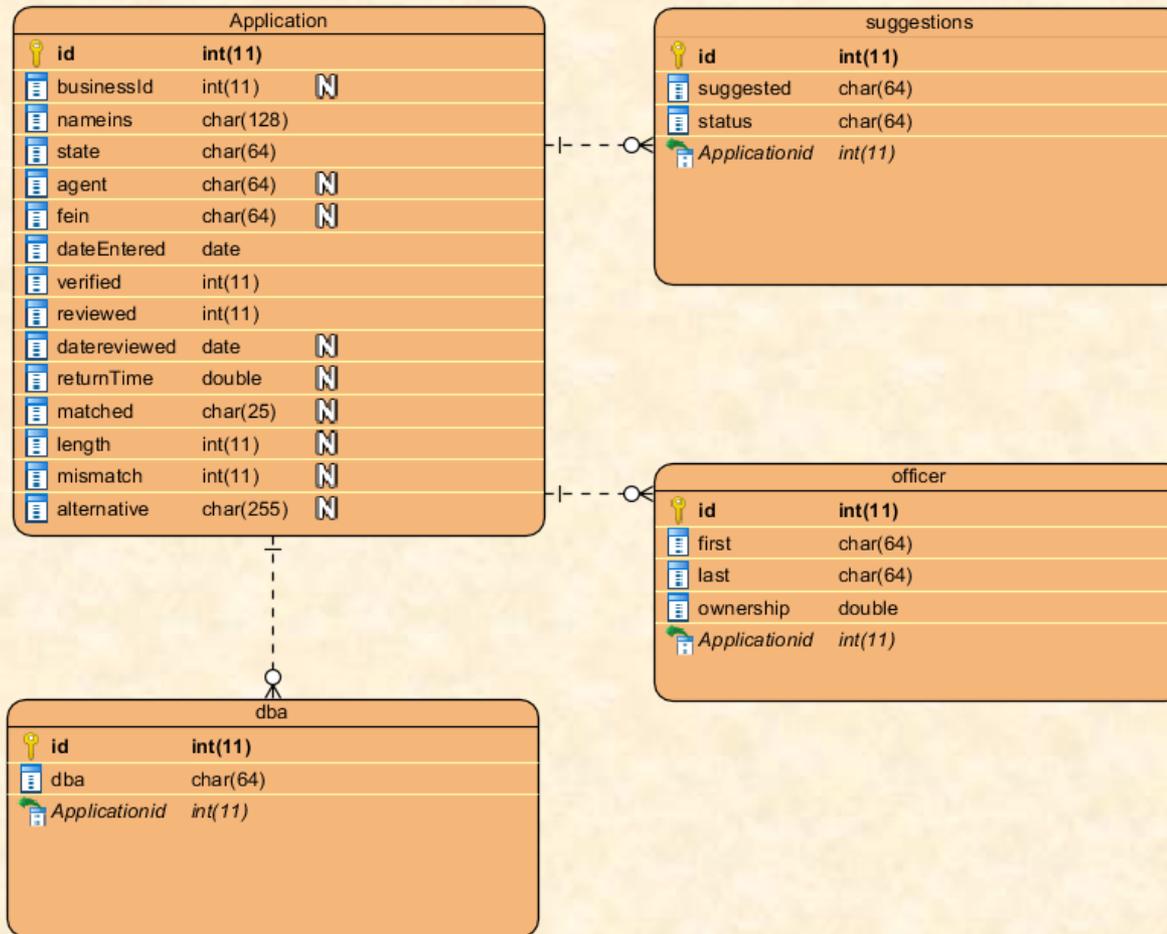
- Webpages built with a Model-View-Controller system
- Webpage forms implemented with Ajax calls using jQuery and buttons implemented with JavaScript to prevent page reloads
- Softbot built in UiPath using a conditional series of modular workflows, organized by state
- MySQL database to store application information and softbot search results



# System Architecture



# Database Architecture



# System Components

- Hardware Platforms
  - CentOS Linux server running NGINX
  - MySQL database
- Software Platforms / Technologies
  - UiPath for softbot
  - PHP
    - PhpStorm IDE connected to GitLab repo
  - JavaScript, Node.js, jQuery
    - Grunt/Less
  - HTML/CSS via Bootstrap



# Risks

- Risk 1
  - Click trigger does not work (across any of our devices) – high
  - Continue to use other working triggers while scouring the forums and reaching out to developers for a potential cause and fix.
- Risk 2
  - “I’m not a robot” buttons - high
  - Re-work UiPath workflow for the SoS sites that have robot checks so that the robot is invoked after the user is already on the website
- Risk 3
  - UiPath takes over users’ screens - medium
  - Create documentation so that the user is aware of what is happening and why. We can also add a manual verification option to avoid using bot
- Risk 4
  - SoS website changes - low
  - Modularization makes fixing softbot easy. We will document and teach client how to adjust to changes in a SoS website.



# Questions?

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